CLAIMS

WHAT IS CLAIMED IS:

1. A refrigeration apparatus provided with a refrigerant circuit **(90)** having a plurality of refrigerant circulating routes and capable of operation in a mode where the plurality of refrigerant circulating routes differ in at least one of refrigerant evaporation temperature and refrigerant condensation temperature,

wherein a compressor **(10)** of the refrigerant circuit **(90)** comprises a single casing **(11)** in which a first compression mechanism **(31)** linked to a first refrigerant circulating route and a second compression mechanism **(32)** linked to a second refrigerant circulating route are arranged.

2. The refrigeration apparatus of claim 1,

wherein the first and second compression mechanisms **(31, 32)** differ from each other in compression ratio.

3. The refrigeration apparatus of claim 1,

wherein the first and second compression mechanisms **(31, 32)** differ from each other in displacement volume.

4. The refrigeration apparatus of any one of claims 1-3,

wherein:

the first and second compression mechanisms **(31, 32)** are scroll compression mechanisms,

an orbiting scroll **(50)** integrated by sequentially layering a first flat-plate part **(51)**, a first movable-side wrap **(53)**, a second flat-plate part **(52)** and a second movable-side wrap **(54)**, and a fixed scroll **(40)** having a first stationary-side wrap **(42)** which engages

the first movable-side wrap **(53)** and a second stationary-side wrap **(47)** which engages the second movable-side wrap **(54)** are provided,

the first stationary-side wrap **(42)** and the first movable-side wrap **(53)** together form the first compression mechanism **(31)**, and

the second stationary-side wrap **(47)** and the second movable-side wrap **(54)** together form the second compression mechanism **(32)**.

5. The refrigeration apparatus of any one of claims 1-3,

wherein:

the first and second compression mechanisms **(31, 32)** are scroll compression mechanisms,

an orbiting scroll **(50)** having a first movable-side wrap **(53)** formed in standing manner on one surface of a flat-plate part **(55)** and a second movable-side wrap **(54)** formed in standing manner on the other surface of the flat-plate part **(55)**, and a fixed scroll **(40)** having a first stationary-side wrap **(42)** which engages the first movable-side wrap **(53)** and a second stationary-side wrap **(47)** which engages the second movable-side wrap **(54)** are provided,

the first stationary-side wrap **(42)** and the first movable-side wrap **(53)** together form the first compression mechanism **(31)**, and

the second stationary-side wrap **(47)** and the second movable-side wrap **(54)** together form the second compression mechanism **(32)**.

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